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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/532,076

04/21/2005

Youichi Matsuyama

02-147-TN

6203

23400

7590

07/12/2006

POSZ LAW GROUP, PLC  
12040 SOUTH LAKES DRIVE  
SUITE 101  
RESTON, VA 20191

EXAMINER

MULLINS, BURTON S

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/532,076

Applicant(s)

MATSUYAMA, YOUICHI

Examiner

Burton S. Mullins

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 21 April 2005 has been considered by the examiner.

### ***Response to Amendment***

3. The preliminary amendment filed on 21 April 2005 has been entered.

### ***Drawings***

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "restriction member...attached to the gear housing" (claim 6) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. Fig.2 shows the restriction member 41 attached to the cover 13 of the motor. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure

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must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

5. Claims 1-6 are objected to because of the following informalities: In claim 1, "the motor characterized and having" is not correct grammar, "fixed inside of the opening portion" should be --fixed inside the opening portion--, and the phrase "receiving a circuit board therein" lacks antecedent basis. It will be presumed that the motor housing receives the circuit board. In claims 4 and 5, "a direction perpendicular to a direction of a plane of the circuit board" is excessively wordy and should be simply --a direction perpendicular to a plane of the circuit board--. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

6. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1, the phrase "counter-insertion side thereof" is confusing and indefinite

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because the antecedent of “thereof” is not clear. Further, the term “opening portion” is vague and indefinite because it is not clear if this defines the entire space in the motor housing in which the circuit board is housed, or if it refers only to that plane-shaped region at the opening or mouth of the motor housing. If the latter, then it makes little sense to refer to a “counter-insertion side” since there is no “side” to this region. Finally, the phrase “is limited from contacting” is vague and indefinite because it is not clear whether this means the restriction member contacts the cover or not.

***Claim Rejections - 35 USC § 102***

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-2 and 5, as best understood, are rejected under 35 U.S.C. 102(e) as being anticipated by Mao et al. (US 6,969,933). Mao teaches a motor comprising a motor portion 12 and a gear housing 56 integrally assembled together with the motor portion, the gear housing enclosing a speed-reduction mechanism 54 for reducing a rotational speed of the motor portion, [the motor portion] receiving a circuit board 42 therein (in brush housing 28; Figs.4&5), the motor characterized and having: an opening portion (corresponds to edge of housing 28) facing the motor portion [sic] (Fig.1); a board-installing portion (brush housing) 28 to hold the circuit board 42 inserted through the opening portion and along an axial direction defined along a center

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of the motor portion (along armature/shaft 20; Figs.1&2&6); and a cover member (part of gear housing) 56 to block the opening portion (Fig.1), and further comprising a restriction member (detents) 64 fixed inside of the opening portion (Fig.4) and restricting the circuit board from moving to a counter-insertion side thereof in the axial direction, i.e., in a direction opposite to the axial direction the circuit board is installed, the restriction member 64 is installable at a predetermined position in which the restriction member is limited from contacting with the cover member in the axial direction (as seen in Fig.2, the detents 64 do not contact the cover member or gear housing 56).

Regarding claim 2, the gear housing 56 is generally “planiform”, i.e. planar, in the region 58, with the circuit board 42 also disposed “along a planiform direction”, i.e. generally parallel to the region 58. Note the angle B is disclosed as being between 0 and 10 degrees (c.3, lines 50-56), with the lower angles in the range meeting the limitation of “along a planiform direction”, i.e., generally parallel to the region 58 of the gear housing 56.

With regard to claim 5, the restriction member/detent 64 is generally perpendicular to the circuit board 42 when the angle B is within the lower angles of the disclosed range of  $0 < B < 10$  degrees.

#### ***Allowable Subject Matter***

9. Claims 3, 4 and 6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Regarding claim 3, the prior art does not teach that “the restriction member is disposed at approximately a center portion of the circuit board”. In

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Mao, the restriction members or detents 64 are disposed at more-or-less the ends of the circuit board 42 (Figs.4&5). Regarding claim 4, the prior art does not teach that "the gear housing is provided with a first attachment portion and a second attachment portion to interpose the circuit board therebetween in a direction perpendicular to...a plane of the circuit board; and the restriction member is fixed to span a clearance between the first attachment portion and the second attachment portion." Regarding claim 6, the prior art does not teach that "the restriction member is formed to have an elastic force at least in the direction perpendicular to...the plane of the circuit board and attached to the gear housing to generate the elastic force." In Mao, the restriction member/detent 64 is attached to the brush housing, not the gear housing.

### *Conclusion*

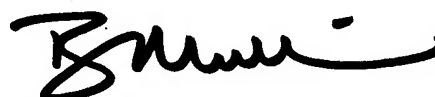
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 571-272-2029.

The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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Burton S. Mullins  
Primary Examiner  
Art Unit 2834

bsm  
10 July 2006